

REMARKS

Claims 1, 4, 5, 7, and 10-16 are pending in the application. Claims 2, 3, 6, 8, and 9 are withdrawn from consideration. Reconsideration is respectfully requested.

In the outstanding Office Action, claims 1, 4, 5, 7 and 10-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2001/0024278A1 (Yoshida) in view of the Applicant's Admitted Prior Art (A.P.A), and claims 11-16 were rejected under 35 U.S.C. § 102(b) as being anticipated by Yoshida. Reconsideration is respectfully requested.

35 U.S.C. § 103 Rejections

Claims 1, 4, 5, 7 and 10-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshida in view of the Applicant's Admitted Prior Art (A.P.A). Applicant respectfully traverses the rejection.

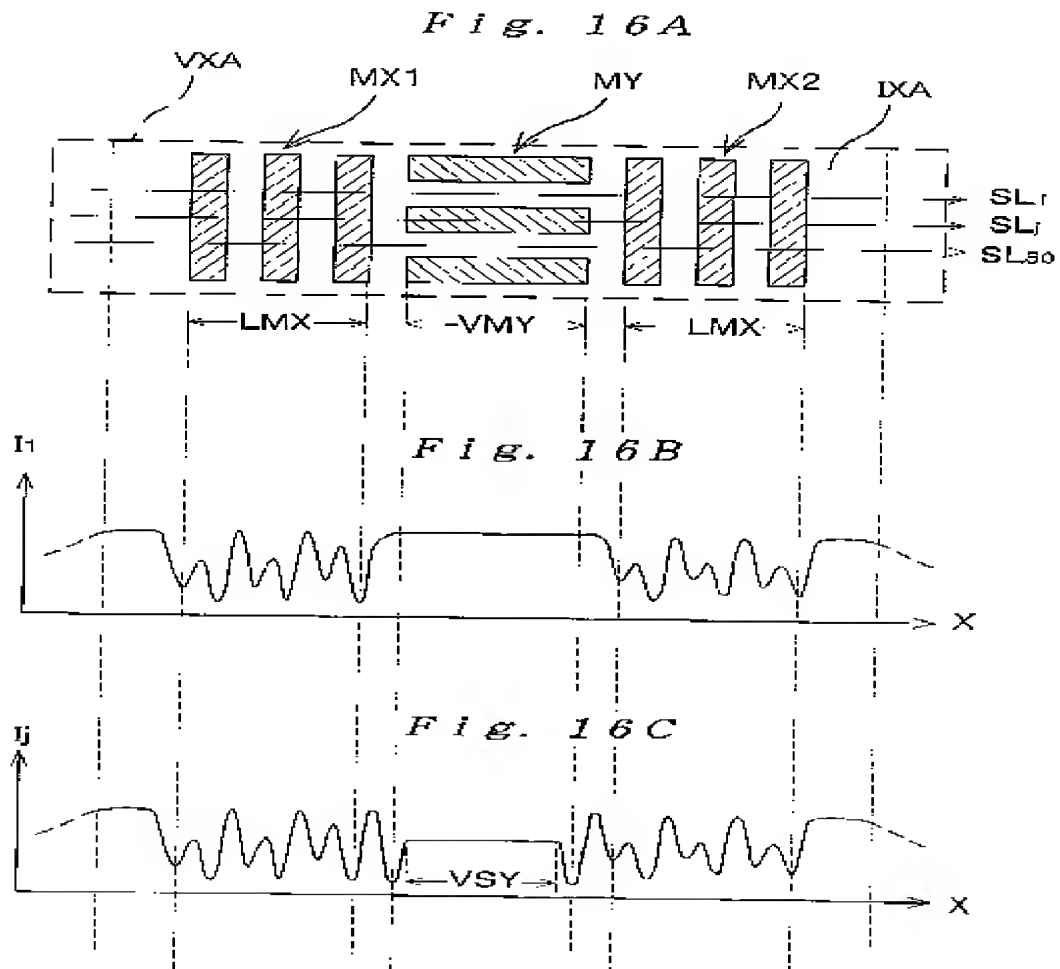
Claims 1, 11 and 14 have been amended to clarify the invention. In particular, claims 1, 11 and 14 have been amended to include the phrase: "having a width Z." In addition, claim 1 has been amended to recite:

wherein an approximate center of a Y mark in the X mark is determined from the width Z of the first alignment signal source and the maximum received signal strength at the first signal detector, and

wherein an approximate center of the X mark in the Y mark is determined from a width Z of the second alignment signal source and the maximum received signal strength at the second signal detector.

Claims 11 and 14 have also been amended with language similar to that used in the above two limitations of claim 1, respectively. Support for the amendments is shown at least in FIGs. 7A-7C and provided at least in paragraphs [0028] to [0030] of the originally filed specification. Therefore, it is respectfully submitted that the amendment raises no questions of new matter.

Yoshida discloses a mark for detecting a two-dimensional position serving as a complex mark in which the mark *MX1* for detecting the *X*-position, the mark *MY* for detecting the *Y*-position, and the mark *MX2* for detecting the *X*-position are sequentially arranged, as shown in **FIG. 16A** below.¹ Further, Yoshida discloses, if obtaining the average of the signal intensity at the *X*-position in the individual scanning line *SL_j*, an approximately constant value between the signal intensity in the space portion and the signal intensity in the line portion continues in the mark signal area having the width *VS_Y* and corresponding to the mark *MY*, as shown in **FIG. 16D**.² That is, though Yoshida discloses a complex mark locating a segment of a Y-mark (*MY*) inside an X mark field area (*VXA*), it is respectfully submitted that



¹ *Id.* at **FIG. 16A**; and page 13 and paragraph [0169], lines 3-8.

² *Id.* at **FIG. 16A**; and page 14 and paragraph [0170], lines 15-24.

However, Yoshida nowhere discloses, as amended independent claims 1, 11 and 14 recite:

wherein an approximate center of a Y mark in the X mark is determined from the width Z of the first alignment signal source and the maximum received signal strength at the first signal detector, and/[or]

wherein an approximate center of the X mark in the Y mark is determined from a width Z of the second alignment signal source and the maximum received signal strength at the second signal detector.

Nor does Yoshida disclose an alignment signal “having a width Z.” That is, Yoshida nowhere discloses determining: “an approximate center” of an alignment mark “from a width Z” and “maximum received signal strength” of an “alignment signal,” as recited in the amended claims 1, 11 and 14. Therefore, it is respectfully submitted that Yoshida does not disclose the claimed invention.

The outstanding Office Action acknowledges deficiencies in Yoshida and attempts to overcome these deficiencies with the APA. However, the APA cannot overcome all of the deficiencies of Yoshida, as discussed below.

The original specification discloses background art techniques for alignment marks in **FIG. 1A – FIG. 1C** and **FIG. 2** and descriptive paragraphs [0003] to [0005]. However, the background art or APA portions of the original specification nowhere discloses, as amended claims 1, 11 and 14 recite:

wherein an approximate center of a Y mark in the X mark is determined from the width Z of the first alignment signal source and the maximum received signal strength at the first signal detector, and/[or]

wherein an approximate center of the X mark in the Y mark is determined from a width Z of the second alignment signal source and the maximum received signal strength at the second signal detector.

Nor does the background art disclose an alignment signal “having a width Z.” That is, the APA nowhere discloses determining: “an approximate center” of an alignment mark “from a width Z” and “maximum received signal strength” of an “alignment signal,” as recited in the amended claims 1, 11 and 14. Thus, it is respectfully submitted that the APA *cannot* overcome all of the deficiencies of Yoshida. Therefore, it is respectfully submitted that neither Yoshida nor the APA, whether taken alone or in combination do not disclose, suggest or make obvious the claimed invention and that independent claims 1, 11 and 14, and claims dependent thereon, patentably distinguish thereover.

35 U.S.C. § 102 Rejections

Claims 11-16 were rejected under 35 U.S.C. § 102(b) as being anticipated by Yoshida. However, as discussed above, Yoshida nowhere discloses, as amended independent claims 11 and 14 recite:

wherein an approximate center of a Y mark in the X mark is determined from the width Z of the first alignment signal source and the maximum received signal strength at the first signal detector, and/[or]

wherein an approximate center of the X mark in the Y mark is determined from a width Z of the second alignment signal source and the maximum received signal strength at the second signal detector.

Nor does Yoshida disclose an alignment signal “having a width Z.” That is, Yoshida nowhere discloses determining: “an approximate center” of an alignment mark “from a width Z” and “maximum received signal strength” of an “alignment signal,” as recited in the amended claims 1, 11 and 14. Therefore, it is respectfully submitted that Yoshida does not disclose, anticipate or inherently teach the claimed invention and that independent claims 11 and 14, and claims dependent thereon, patentably distinguish thereover.

Conclusion

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 09-0456, under Order No. 21806-00157-US from which the undersigned is authorized to draw.

Dated: August 8, 2007

Respectfully submitted,

Electronic signature: /Myron Keith Wyche/
Myron Keith Wyche
Registration No.: 47,341
CONNOLLY BOVE LODGE & HUTZ LLP
1990 M Street, N.W., Suite 800
Washington, DC 20036
(202) 331-7111
(202 293-6229 (Fax)
Agent for Applicant